

IN THE CLAIMS:

1. (Previously presented) A spinal stabilization system, comprising:
an elongated stabilization device including a curved configuration along a longitudinal axis that defines an arc along a length of said stabilization device, said stabilization device including a cross-section along said length with said length and cross-section sized for positioning through a pathway formable from an opening in a lateral mass of a first vertebra and into the first vertebra, through a facet joint formed by an articular surface of the first vertebra and an articular surface of an adjacent bony structure, and into the adjacent bony structure.
2. (Original) The system of claim 1, wherein said stabilization device is a rigid rod.
3. (Withdrawn) The system of claim 1, wherein said stabilization device includes a threaded nose at a leading end thereof.
4. (Withdrawn) The system of claim 3, wherein said stabilization device includes a flexible body extending from said leading end.
5. (Withdrawn) The system of claim 4, wherein said stabilization device includes a threaded nose at a trailing end of said body.
6. (Withdrawn) The system of claim 5, wherein said leading end nose and said trailing end nose include a thread pitch that differs from one another.
7. (Withdrawn) The system of claim 3, wherein said stabilization device includes a body extending from said leading end to a trailing end, and further comprising an engagement member at a trailing end of said body projecting outwardly from said body, said engagement member being sized greater than a size of the opening.

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8. (Original) The system of claim 1, wherein said stabilization device includes an elongated outer member and an elongated inner member movably positioned in said elongated outer member.

9. (Original) The system of claim 8, wherein said elongated outer member includes a tapered leading end for insertion into the pathway, an opposite trailing end, and a passage extending therebetween.

10. (Original) The system of claim 9, wherein said inner member is received in said passage, said inner member being movable between a first position wherein said leading end and said trailing end of said outer member are in a collapsed insertion configuration to a second position wherein at least one of said leading end and said trailing end of said outer member are expanded to engage bony tissue along the insertion pathway.

11. (Original) The system of claim 10, wherein each of said leading end and said trailing end are expanded to engage bony tissue along the insertion pathway when said inner member is in said second position.

12. (Original) The system of claim 10, wherein said inner member includes a leading end nose with a tapered profile, and said outer member includes an inner surface along said passage with a tapered portion adjacent said leading end of said outer member, wherein in said second position said leading end nose engages said tapered portion of said passage to expand said leading end of said outer member.

13. (Original) The system of claim 12, wherein said inner member includes an enlarged trailing end portion and an intermediate nose tapered between said enlarged trailing end portion and a portion of said inner member extending from said enlarged trailing end portion, and said inner surface of said outer member includes an enlarged trailing end portion, wherein in said second position said intermediate nose of said inner member engages said inner surface of said passage at said enlarged trailing end portion to radially expand said trailing end of said outer member.

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14. (Original) The system of claim 13, wherein said inner member includes a threaded portion to threadingly engage a threaded portion of said inner surface along said passage.

15. (Original) The system of claim 13, wherein said intermediate nose and said leading end nose simultaneously engage respective portions of said inner surface of said passage to expand said leading end of said outer member and said trailing end of said outer member.

16. (Original) The system of claim 10, wherein said inner member includes an enlarged trailing end portion and an intermediate nose tapered between said trailing end portion and a portion of said inner member extending from said enlarged trailing end portion, wherein in said second position said intermediate nose of said inner member engages said outer member to expand said trailing end of said outer member into engagement with bony tissue along the pathway.

17. (Previously presented) The system of claim 1, wherein said length and cross-section of said stabilization device is structured to extend through the pathway when the adjacent bony structure is a second vertebra.

18. (Previously presented) The system of claim 1, wherein said length and cross-section of said stabilization device is structured to extend through the pathway when the adjacent bony structure is an occiput.

19. (Previously presented) The system of claim 1, wherein said length and cross-section of said stabilization device is structured to extend through the pathway when the adjacent bony structure is a second vertebra, and the pathway is formed to extend through the second vertebra, through adjacent articular surfaces of the second vertebra and an occiput, and into the occiput.

20. (Original) The system of claim 1, wherein said stabilization device includes a leading end and a trailing end, at least one of said leading end and said trailing end being expandable to engage adjacent bony tissue along the pathway.

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21. (Previously presented) The system of claim 20, wherein each of said leading end and said trailing end is expandable.

Claim 22 (Cancelled).

23. (Withdrawn) The system of claim 1, further comprising:

a drill instrument including an outer shaft with a passage, a cutting device at a leading end of said outer shaft and a coupling member at a trailing end of said outer shaft for receiving a rotary force, further comprising a flexible inner member extending through said passage and coupling said cutting device to said coupling member, wherein said outer shaft includes a curved configuration corresponding to the curved configuration of said stabilization device and being operable to form the pathway for receiving the stabilization device.

24. (Withdrawn) The system of claim 1, further comprising:

an insertion instrument releasably engageable to said stabilization device; and
a pair of anchors engageable to respective ones of the first vertebra and the adjacent bony structure, said insertion instrument being pivotally mountable to said pair of anchors and movable relative thereto to guide said stabilization device along an arc co-linear with the pathway.

25. (Previously presented) A spinal stabilization system, comprising:

an elongated stabilization device including a curved configuration along a longitudinal axis that defines an arc along a length of said stabilization device, said stabilization device including a cross-section sized for positioning through a pathway formed through a joint between adjacent bony structures, said stabilization device including an elongated outer member and an elongated inner member, said inner member being movable in said outer member between a first position wherein said stabilization device includes a reduced profile for insertion in the pathway and a second position wherein said inner member engages said outer member to provide at least a portion of said stabilization device with an enlarged profile for engagement to bony tissue along the pathway.

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26. (Previously presented) The system of claim 25, wherein said length and cross-section are sized for positioning in the pathway when the pathway extends from an opening in a lateral mass of a first vertebra and into the first vertebra and through a facet joint formed by adjacent articular surfaces of the first vertebra and an adjacent bony structure and into the adjacent bony structure.

27. (Original) The system of claim 25, wherein said outer member includes a tapered leading insertion end, an opposite trailing end, and a passage extending therebetween for receiving said inner member.

28.(Previously presented) The system of claim 27, wherein in said first position said leading end and said trailing end of said outer member are in a collapsed insertion configuration, and in said second position at least one of said leading end and said trailing end are expanded to engage bony tissue along the pathway.

29. (Previously presented) The system of claim 28, wherein each of said leading end and said trailing end are expanded to engage bony tissue along the pathway when said elongated inner member is in said second position.

30. (Original) The system of claim 27, wherein said inner member includes a leading end nose with a tapered profile, and said outer member includes an inner surface along said passage with a tapered portion adjacent said leading insertion end, wherein in said second position said tapered leading end nose engages said tapered portion of said passage to expand said leading end of said outer member.

31. (Original) The system of claim 30, wherein said inner member includes an enlarged trailing end portion and an intermediate nose tapered between said enlarged trailing end portion and a portion of said inner member extending from said enlarged trailing end portion, and said outer member includes an inner surface along said passage, wherein in said second position said

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intermediate nose of said inner member engages said inner surface of said passage to radially expand said trailing end of said outer member.

32. (Original) The system of claim 31, wherein said inner member includes a threaded portion to threadingly engage a threaded portion of said inner surface along said passage.

33. (Original) The system of claim 31, wherein said intermediate nose and said leading end nose engage respective portions of said inner surface of said passage to expand said leading end of said outer member and said trailing end of said outer member.

34. (Original) The system of claim 27, wherein said elongated inner member includes an enlarged trailing end portion and an intermediate nose tapered between said trailing end portion and a portion of said elongated inner member extending from said enlarged trailing end portion, wherein in said second position said intermediate nose of said elongated inner member engages said elongated outer member to expand said trailing end of said elongated outer member and engage bony tissue along the pathway.

35. (Previously presented) The system of claim 25, wherein said length and cross-section are sized for the adjacent bony structures to be first and second cervical vertebrae.

36. (Previously presented) The system of claim 25, wherein said length and cross-section are sized for the adjacent bony structures to be a first cervical vertebra and an occiput.

37. (Previously presented) The system of claim 25, wherein said length and cross-section are sized for the adjacent bony structures to be first and second cervical vertebrae and the occiput.

38. (Original) The system of claim 25, wherein said stabilization device includes a leading end and a trailing end, at least one of said leading end and said trailing end being expandable to engage bony tissue along the pathway.

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39. (Original) The system of claim 38, wherein each of said leading end and said trailing end is expandable to engage bony tissue along the pathway.

Claims 40-54 (Cancelled)

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